DOCUMENT RESUME

ED 084 367 CE 000 508

AUTHOR McCracken, J. David, Comp.
TITLE Summaries of Studies in Agricultural Education, 1972-73.
INSTITUTION Ohio State Univ., Columbus. Dept. of Agricultural Education.
PUB DATE 73
NOTE 44p.

EDRS PRICE MF-$0.65 HC-$3.29
DESCRIPTORS *Agricultural Education; *Agricultural Research Projects; Doctoral Theses; Literature Reviews; Research Reviews (Publications); Vocational Agriculture

ABSTRACT

The compilation of research in agricultural education includes abstracts of nineteen studies completed at Ohio State University during the 1972-73 year. Nine of the completed studies represent staff research and ten represent doctoral theses. They are arranged alphabetically by author and indexed by subject. A list of the forty-six Studies in Progress during 1973-74 is also included. (Author)

FILMED FROM BEST AVAILABLE COPY

ED 084367

SUMMARIES OF STUDIES

IN

AGRICULTURAL EDUCATION

1972-73

U.S. DEPARTMENT OF HEALTH
EDUCATION & WELFARE
NATIONAL INSTITUTE OF
EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

COMPILED AND EDITED
BY
J. DAVID MCCRACKEN

DEPARTMENT OF AGRICULTURAL EDUCATION
THE OHIO STATE UNIVERSITY
COLUMBUS, OHIO

1973

CE000508

FOREWORD

This compilation of research in agricultural education includes abstracts of nineteen studies completed at The Ohio State University during the 1972-73 year. Nine of the completed studies represent staff research and ten represent doctoral theses. They are arranged alphabetically by author and indexed by subject. A list of the forty-six Studies in Progress during 1973-74 is also included.

Research has been an important function of the Department of Agricultural Education since it was established in 1917. Although these studies have contributed much to the development of agricultural education in the state and nation they should be of additional value as a foundation for further research in this field.

We trust that this listing will be helpful to those desiring to make further research contributions in agricultural education.

J. David McCracken
Assistant Professor
Department of Agricultural Education

TABLE OF CONTENTS

	Page
FOREWORD	II
Summaries of Studies, 1972-73	1
Studies in Progress 1973-74	33
Subject Index, Summaries of Studies, 1972-73	37

BOUCHER, Leon W., The Evaluation of Technical Agriculture Courses by Vocational Agriculture Teachers With One to Five Years Teaching Experience. Staff Study, 1973, The Ohio State University, Columbus.

Purpose. To identify the strengths and weaknesses of technical agriculture courses in the pre-service program.

Method. One hundred twenty four teachers of vocational agriculture evaluated the technical agriculture courses completed in the pre-service program. Seventy-two courses were assembled in the questionnaire list to be evaluated as to effectiveness of the teaching and usefulness of the skills taught.

Findings. Technical agriculture courses rated most useful by teachers of vocational agriculture were: Weed Control, Livestock Judging, Dairy Herd Management, Livestock Management, Beef Cattle Production, Agricultural Power, Farm Record Keeping and Analysis, and Natural Resources. Technical agriculture courses rated well taught were: Livestock Judging, Plants and Man, Turf Grass, Farm Safety. Only one of the most useful courses was identified as well taught whereas two of the most useful courses were identified as very poorly taught. There appeared to be little correlation between the usefulness of a technical agriculture course and the degree to which it was well taught.

BOUCHER, Leon W., Professional Performance Activities for Majors in Agricultural Education. Staff Study, 1973, The Ohio State University, Columbus.

Purpose. To develop a list of professional performance activities for majors in agricultural education.

Method. The 516 professional competencies, identified in a study by The Center for Vocational-Technical Education, were utilized by student teachers for three quarters to identify those specific abilities and learning experiences needed by majors in agricultural education. The performance of the student teachers was analyzed in a workshop with 27 cooperating teachers.

Findings. Twenty-five major competencies were identified. A total of 138 essential learning experiences were planned to develop in students the needed abilities. A check list was developed so students could record, in cooperation with their cooperating teacher, whether the experiences could be performed with no help, with some help, with considerable help, or whether they could not be performed. Seminars are being conducted with cooperating teachers on ways and means of providing and evaluating the identified learning experiences. Activities will continue to be developed and refined during utilization.

CUMMINS, James E., A Follow-Up of Technical Agricultural Graduates and Dropouts in Ohio. Dissertation, Ph.D. 1973, Library, The Ohio State University, Columbus.

Purpose. The purposes of this study were: (1) to describe the occupational performance and educational attainment of persons completing and/or leaving the post-high school agricultural technician programs in Ohio; (2) to determine the degree to which graduates and dropouts are satisfied with their employment; and (3) to determine the degree to which employers are satisfied with graduates and dropouts of agricultural technician programs.

Method. The universe of this study included all 1965, 1966, 1967, and 1968 graduates and dropouts of post-high school agricultural technician programs in Ohio, plus the employers of graduates and dropouts of these programs. The four agricultural programs included were agri-business, agri-equipment, food processing, and horticulture.

Data concerning the number of graduates and dropouts, along with their last known address, were obtained from the directors of the agricultural technologies in this study and from previous research reports concerning agricultural technician education in Ohio.

Findings. Most graduates and dropouts accepted full-time employment after completing and/or leaving their agricultural technician program. Most graduates were "well prepared" for their present employment which was "highly related" to their technical program.

Graduates averaged fewer jobs, held more job titles of management or mid-management, and had fewer job titles of "laborer" than dropouts. They had a higher average current salary per month and a higher average beginning salary per month than dropouts.

Better salaries was the factor which influenced most graduates and dropouts to change jobs. Very few graduates and dropouts changed jobs because of "lack of necessary skills." Graduates appeared to be more mobile than dropouts.

CUMMINS, James E. and BENDER, Ralph E., Agricultural Technician Education in Ohio, 1971-72. Staff Study, 1973, Department of Agricultural Education, The Ohio State University, Columbus.

Purpose. To identify the characteristics of students in the technical agriculture programs in Ohio and to determine the association between selected student characteristics, their success in the program and their later success in life.

Method. Data were gathered by questionnaire from 684 students, graduates, employers and dropouts representing a total group population of 928. Program information was obtained from technical agriculture teachers. Data were summarized by frequencies, means, and percentages.

Findings. The typical first year enrollee was 19.4 years of age, a high school graduate who had achieved a 2.4 grade point average and was at the 59.2 percentile in his high school class. Twenty-eight percent of the enrollees were from farm homes, and 45 percent listed urban residences; over 66 percent of the fathers of enrollees were employed in non-agricultural business while most of the remainder were engaged in farming. Approximately 47 percent of the first year students lived within fifty miles of their institution and 36 percent lived beyond 100 miles. Forty-four percent of all enrollees commuted. Increased earning ability was given the highest rating by enrollees when asked why they continued their education beyond high school. Outdoor, manipulative and managerial positions were favored over office and sales work. The dropout rate was nearly 21 percent.

The majority of graduates were employed in agricultural jobs. Advancement, working conditions, training opportunities and employer were most highly rated influences in selection of a position. Vocational

agriculture was rated highest in value among all high school courses. Being an FFA officer or member was rated as the most valuable high school activity in both technical school classes and on the job. Over 74 percent reported satisfaction with their jobs.

Of the 29 dropouts who responded, 20 said technical school was helpful to them. Major causes for discontinuing were dissatisfaction with the program, lack of money, low grades and military service.

Employers rated graduates high in initiative, integrity, judgment and responsibility. Graduates were rated "average or better" in most areas. It was concluded that generally adequate preparation had been given graduates.

FOREMAN, Ronald L., Relationship of an Early Placement Program to the Transition From School to Full-Time Employment. Dissertation, Ph.D. 1973, Library, The Ohio State University, Columbus.

Purpose. To evaluate the relationship of an early placement program to the initial transition from school to full-time employment and to determine if actual work experience as part of the high school curriculum effected attitudes toward work and/or self-esteem.

Method. The sample consisted of 200 students enrolled in sixteen classroom units from thirteen school districts in Ohio. Classroom units were selected at random from the accessible population. One hundred students received a six to nine week early placement as part of the vocational curriculum during the second semester of the senior year. The remainder of the students involved in the study received the conventional laboratory program throughout the senior year. A nonequivalent control group design was used.

An effort was made in the study to test the equivalency between groups through use of intelligence quotient; general aptitude test battery profiles; grade point averages for the senior year; and high school grades for English, Mathematics, Science and Vocational Education.

Data were gathered by student and employer responses to questionnaires, employment service information, self-esteem inventory, modified from Stanley Coopersmith's esteem inventory and attitude towards work scale.

Findings. Equivalency did exist between groups.

There were positive relationships among attendance, punctuality, safety and adherence to employer regulations and the ability to adjust in initial employment. A positive relationship also existed among desire to advance, employer opinion of advancement potential and promotions offered and accepted and the ability to adjust in initial employment. Students of

the early placement program were offered and accepted more opportunities for advancement. Students of the comparison group tended to have a greater desire for advancement.

There was a significant difference between groups for days required to attain full employment upon graduation. Students of the comparison group required 18 more days to acquire employment.

No significant differences existed between the early placement group and students in the conventional vocational programs relative to self-esteem or work attitudes.

HOWELL, David L., The Effect of a Student Manual on the Attitudes of High School Students Toward Environmental Protection. Dissertation, Ph.D. 1973, Library, The Ohio State University, Columbus.

Purpose. To determine if the use of a student manual, Introduction to Environmental Protection, aided high school students enrolled in vocational agriculture and science courses in formulating positive attitudes toward the protection of the environment to a greater degree than students taught environmental protection without the use of the student manual, and to investigate the relationships between selected assigned independent variables and the class mean posttest attitude inventory scores.

Method. The design of the experiment was the Solomon Four-Group Design.

The following assigned independent variables were tested: 1) the number of professional environmental education courses completed by the instructor, 2) number of weeks devoted to teaching the environmental protection unit, 3) the number of films shown in teaching the environmental protection unit, and 4) the number of experiments instructors used in teaching the unit. Also investigated was the relationship between students' posttest attitude inventory scores and their occupational choice.

An attitude inventory developed by the research was used to measure students' attitudes toward the protection of the environment.

Findings. There was no statistically significant difference in post-test attitude inventory scores between students using the student manual, Introduction to Environmental Protection, and students not using the student manual. The science classes had a higher posttest attitude inventory score than did the vocational agriculture classes. A positive but moderate

relationship was found to exist between the students' posttest attitude inventory scores and the number of professional environmental education courses taken by the instructor. No significant relationships existed between posttest attitude inventory scores and number of weeks devoted to the instructional unit, number of films shown, and number of experiments.

McCRACKEN, J. David, Information Needs of State Directors of Vocational Education. Staff Study, 1973, The Center for Vocational and Technical Education, The Ohio State University, Columbus.

Purpose. To identify the critical problems of state directors of vocational education and the information sources they utilized.

Method. A sample of 15 state directors was randomly selected by region. Each respondent was asked to respond to a mail questionnaire and 15 telephone interviews over a 30-week period of time between January and August 1971. A total of 216 telephone interviews were conducted through which 341 major professional problems were identified. Data were described as frequencies and percentages of group response levels.

Findings. Major problems of state directors related to administrative leadership and finance. Program planning, staff, administrative organization, and decision-making were major sub-problems within the area of administrative leadership. The greatest time and effort was expended in resolving problems related to finance. Information was needed to resolve 87.9 percent of the reported problems.

Participants were more likely to seek information through personal contacts than by searching literature. Resolution of problems was delegated to subordinates. Information agencies were seldom used.

Research information was seldom desired but descriptive research results was preferred when compared with experimental studies. Reports and pamphlets were used almost to the exclusion of bibliographies, books, guides, indexes, and periodicals. Accessibility of materials was a major factor related to utilization, as was type and/or form of the information.

Personal information sources were selected because of their job responsibility, the quality of their work, their understanding of the problem, or the type or form of data they could provide.

McCRACKEN, J. David and GILLESPIE, Wilma B., Information Needs of Local Administrators of Vocational Education. Staff Study, 1973, The Center for Vocational and Technical Education, The Ohio State University, Columbus.

Purpose. To identify the critical problems of local administrators of vocational education and the information sources they utilized.

Method. Five states and alternates were selected in a stratified random sample. States were stratified by funds expended for vocational education and by region. Six local administrators representing secondary and post-secondary education were randomly selected for each state. Each of the 30 participants responded to a mail questionnaire and 15 telephone interviews between November 1971 and June 1972. A total of 450 telephone interviews were conducted during which 611 major professional problems were identified. Data were described as frequencies and percentages of group response levels.

Findings. Participants were primarily concerned with administering curriculum, instruction, and programs. They generally perceived little need for information for use in problem resolution.

Most decision-making was done without searching for information. When information was needed, problem resolution was attempted through personal contacts (consultations, visits, and interviews). Decisions were usually made cooperatively, utilizing the expertise of others.

Respondents desired experienced people as their major information source. Literature used most included guides, reports, and periodicals. Substantive personnel on the staff were the most often used personal information sources.

The major criterion for utilization of personal information sources was the quality of information they could provide. Printed materials were selected because of familiarity and content quality.

McCRACKEN, J. David and GILLESPIE, Wilma B., Information Utilization by Vocational Educators. Staff Study, 1973, The Center for Vocational and Technical Education, The Ohio State University, Columbus.

Purpose. To prepare user profiles for local administrators, teacher educators, state directors, and state supervisors of vocational and technical education; and develop guidelines for information dissemination based on the user profiles.

Method. The sample for this study was a composite of the respondents from previous studies. The procedure involved evaluating the data base, tabling needed information, developing user profiles, testing the profiles with a jury of experts, developing guidelines for information dissemination, and testing the guidelines with consultants. Dimensions or variables included in the user profiles were work setting, personal characteristics, major professional problems, decision-making mode, information services used, information sources or products used, characteristics or criteria of products used, and personal information sources used.

Findings. User profiles and guidelines were presented separately for local administrators, teacher educators, state directors, and state supervisors.

McCUTCHEON, James Randall, An Assessment of Factors Related to the Diffusion Strategy for Simulation Training Materials. Dissertation, Ph.D. 1973, Library, The Ohio State University, Columbus.

Purpose. To describe the strategy employed to diffuse three simulation training packages, to describe the characteristics of the workshop participants who were prepared to be trainers and diffusers of simulation materials, and to assess the relationships between selected demographic and attitudinal factors and the stage or phase of plans which the participants developed for utilizing and diffusing the simulation materials.

Method. The simulation training materials were developed by The Center for Vocational and Technical Education.

The diffusion strategy employed to diffuse the materials was designed to achieve widespread diffusion by using a "trainer of trainers" strategy. Persons in leadership positions in vocational and technical education nationwide were selected to attend one of two national simulation trainers' workshops. Tactics utilized were: (1) initial awareness; (2) personal letter follow-up; (3) mailing of workshop announcements and applications; (4) selection and notification of participants; (5) planning and conducting workshops; (6) telephone follow-up of trainers; and (7) distribution of materials.

Five attitudinal variables were assessed: (1) change-orientation, (Russell Change-Orientation Scale); (2) dogmatism, (Rokeach Short-Form Dogmatism Scale); (3) internal-external control (Rotter Internal-External Control Scale); (4) cosmopoliteness (Dye Local-Cosmopolitan Scale); and (5) conservatism (McClosky Conservatism Scale).

Findings. The demographic factors, age, tenure, formal education and experience as a college graduate instructor were found to be positively and

significantly related to the stage of plans which the participants in the simulation trainers' workshops developed for using the materials. These factors all tend to be associated with the trainers' influence over decisions concerning the use of the materials.

Hypotheses related to attitudinal factors and the participants' plans for diffusing the materials were not supported.

MOORE, Philip B., Staffing Patterns in the Cooperative Extension Service. Dissertation, Ph.D. 1973, Library, The Ohio State University, Columbus.

Purpose. The determination of the types and number of staffing patterns in Cooperative Extension throughout the fifty states, the priority of functions of area and county Extension agents in the four program areas of Agriculture, Home Economics, Community Resource Development and 4-H Youth Work; and the description of certain selected characteristics of those states having various patterns of staffing.

Method. The population surveyed for this study included all the Directors of State Cooperative Extension Services and all program leaders for the areas of Agriculture, Home Economics, Community Resource Development and 4-H Youth Work in each of the fifty Cooperative Extension Services in the United States.

Data were collected by means of questionnaries from Extension Directors and program leaders.

Findings. Nine staffing patterns were found to exist in 1972 within the Cooperative Extension Service; four were most widely used. The county only staffing pattern was the most predominant, followed by area and county, separate offices; multicounty, county office; area only, area office. The most frequently used pattern in 4-H and Home Economics was county only, while in Agriculture and Community Resource Development area and county, separate offices was most used. States with a larger budget, more personnel, and with a larger number of counties tended to utilize some type of area staffing over county staffing.

The most frequently used titles were County Extension Agent, Extension Agent, and County Agent for the county-based agents; and Area Agent, and

Area Specialist for the area-based agents. There is a higher priority to provide in-service training over pre-service training. The minimum educational degree for county agents is the Bachelor's degree, and a Bachelor's and Master's degree depending upon program area for area agents. Weaknesses of area staffing reported by program leaders were large geographic areas with the staff spread too thin, and funding problems; strengths included more localized specialized assistance and specialization in a subject as the most frequently reported advantages.

NEAVILL, Arthur T., Criterion-Referenced Assessment of Ninth- and Tenth-Grade Instruction in Vocational Agriculture. Dissertation, Ph.D. 1973, Library, The Ohio State University, Columbus.

Purpose. The study was designed to assess the competencies of tenth-grade vocational agriculture students in Ohio who had completed two years of instruction in vocational agriculture.

Method. Data were collected from 381 tenth-grade students completing two years of instruction in vocational agriculture. A random sample of 31 schools was selected from the 125 local schools in the 19 joint vocational school districts providing agricultural instruction during the 1972-73 school year. Students completed an information questionnaire and a criterion-referenced Principles of Agriculture test. Teachers in the 31 schools completed a form on which they estimated the students' degree of mastery for 65 items on the instrument.

Findings. It was found that 18 per cent of the students correctly answered 76 per cent or more of the 102 items on the criterion-referenced instrument. Approximately one-third of the students correctly answered 76 per cent or more of the agricultural occupations, animal science, and agricultural mechanics items. Ten per cent of the students correctly answered 76 per cent or more of the leadership items, and 15 per cent of the students correctly answered 76 per cent or more of the crop and soil science items.

Teachers were generally unable to estimate accurately their students' degree of mastery on the criterion-referenced items. Eighty-seven per cent of the teachers who incorrectly estimated students' level of mastery over-estimated the students' degree of mastery.

Students who indicated an occupational choice tended to achieve a higher degree of mastery than students not indicating an occupational choice or students who plan to enter the military service. Students naming agricultural job preferences tended to achieve higher levels of mastery for all subject matter areas than students selecting nonagricultural job preferences. Generally, students who reside on farms, students who indicated agricultural job preferences, students whose fathers are employed in agriculturally related jobs or in production agriculture jobs, students who reported higher numbers of supervised experiences, and students who plan to attend post-high school institutions achieved a higher degree of mastery on all items.

Students who had livestock projects, crop and soil science projects, or agricultural mechanics projects performed at a higher degree of mastery in these subject matter areas than students who did not have projects. Generally, as students' participation on FFA committees and in FFA contests and awards activities increased, their degree of mastery on leadership items increased.

NEWCOMB, Lawrence H., The Effect of Contract Grading on Student Performance. Dissertation, Ph.D. 1973, Library, The Ohio State University, Columbus.

Purpose. To determine the effect of contract grading on student performance as measured by a cognitive posttest and to determine the effect of contract grading on final grades students received in the course, students' attitudes toward the course, amount of time students devoted to the course outside of class, amount of assigned reading completed, and the students' perceptions of the extent to which the course met their individual needs.

Method. Intact groups of students enrolled in the course Introduction to Agricultural Education at The Ohio State University were randomly assigned to the two levels of the independent variable, contract grading and conventional grading. A non-equivalent control group design was used for the experiment during Autumn Quarter, 1972 and again for the replication of the study during the Winter Quarter, 1973. The two groups received identical treatment except for the differences inherent in the two grading procedures.

A cognitive posttest developed by the researcher was used to determine the performance of the two groups. Data used to ascertain the differences in final grades were the official grades submitted to the registrar. Students' attitudes toward the course were measured using the Illinois Course Evaluation Questionnaire. Students were asked to give unidentified weekly estimates of the amount of time devoted to the course. The reference librarian provided a record of checked-out readings which was used to compare the amount of reading completed by the two groups. An attitude instrument developed by the researcher was used to yield scores which indicated the perceptions of students regarding the extent to which the course met their individual needs.

Findings. There was no statistically significant difference in the posttest scores of the conventionally graded and contract graded students either quarter. Students contracting for grades Autumn Quarter did not receive significantly higher final grades than the conventionally graded students. However, in the Winter Quarter replication, the grades received by contract graded students were significantly higher than the final grades of the conventionally graded students. No significant differences were found between the groups of students in attitudes toward the course, time spent on the course, amount of reading completed, or the extent students perceived the course to meet their individual needs.

SHANE, James A., Administrative Organizational Structures and Community College Comprehensiveness. Dissertation, Ph.D. 1973, Library, The Ohio State University, Columbus.

Purpose. To determine the kinds of administrative organizational structures being used in community colleges, and to study in greater detail a selected sample of community colleges in order to ascertain whether certain patterns of organization were more highly associated with community college curriculum comprehensiveness.

Method. The major hypothesis of the study was that community colleges which had an administrative organizational structure with deans in charge of each of the three instructional areas would be more comprehensive than community colleges with other types of administrative organizational structures. The investigator identified seven alternative hypotheses which were tested.

The investigator completed an on-site structured interview of 18 community colleges in the states of Washington and Oregon to gather data.

Findings. No significant difference was found between organizational structures and curriculum comprehensiveness. Curriculum comprehensiveness was not significantly related to size of college enrollment, socio-economic heterogeniety of the communities, age of the college, presidential attitude toward comprehensiveness, state level leadership, state funding patterns, or the amount of local control.

Some serendipitous findings of the investigation were: (1) most of the community college presidents were at one time public school superintendents, (2) all of the community college presidents and first level administrators in the study began careers in education as public school teachers, (3) there was a limited number of presidents and first level administrators with occupational backgrounds, (4) there was a significant relationship between

president attitudes and first level administrator attitudes toward comprehensiveness, (5) there was no significant relationship between the vocational effort of the college and its ranking as to comprehensiveness, (6) there was no significant difference between the vocational effort of the college and type of organizational pattern used.

STANLEY, Norman M., Factors Related to Decisions Made by High School Graduates Concerning Post-High School Education. Dissertation, Ph.D. 1973, Library, The Ohio State University, Columbus.

Purpose. To identify factors which were related to the decisions of rural male graduates to attend or not attend post-secondary institutions.

Method. The dependent variable investigated was the decision of the rural male graduate to attend or not attend a post-secondary institution. Major independent variables were personal characteristics, influences of the home environment, characteristics of the high school environment, friends and peer influence, financial situations of the graduate and his parents, the influence of the military draft and the GI Bill provisions, and contributing influences of teachers, guidance counselors, and administrators.

Of particular interest in the school category of variables was the extent to which studying or not studying vocational agriculture related to the decision to attend post-secondary institutions.

The study was conducted in eight Ohio rural high schools located in two different geographic regions of the state. The 394 male graduates of the class of 1970. A total of 154 graduates of the 291 graduates sampled responded in this study.

Findings. The higher the accumulative grade point average in high school the more likely the student would attend a post-secondary institution. The post-high school students indicated a higher degree of uncertainity of their abilities, aptitudes and job opportunities upon graduation from high school than did the non-college students.

Certain parental characteristics showed a high relationship with the decision to attend college. The mother was found to be the more influential

of the two parents. The higher the parents level of education and the higher the classification of the father's occupation the more likely the high school graduate would go to college.

The type of high school curriculum completed was a good indicator of post-high school attendance (the college preparatory being most strongly related to the post-high school decision).

The variables peer influence and parental influence were indicated as having a strong degree of relationship with the dependent variable.

No difference was found between the decisions of vocational agriculture graduates to attend college and non-vocational agriculture graduates.

STARLING, John T., Farm Business Analysis Report of Programs Conducted by Teachers of Vocational Agriculture. Staff Study, 1973, The Ohio State University, Columbus.

Purpose. To provide teachers of agricultural production courses with some "bench marks" relative to certain efficiency factors and to keep them informed of "what is happening on Ohio farms."

Method. Ohio teachers who were conducting Farm Business Planning and Analysis programs submitted 243 farm business summaries for computer analysis. Averages of several selected measures of performance from the farm business analysis were used to secure the data for this study.

Findings. The major findings of this study were as follows:

1. The average capital investment per farm was $132,740.00.
2. The average gross income was $59,395.00.
3. The return to operator and family labor and management was $4.67 per hr.
4. When all costs were included farmers only realized a profit of .13¢ per bushel from corn.
5. Soybeans made Ohio farmers more money than any other grain crop.
6. Farmers actually lost money on wheat.
7. Producing alfalfa has considerable potential as a money making crop for Ohio farmers.
8. In general, beef cattle feeders made very little money in 1972 while both swine breeding and feeding operations made money.
9. The pounds of 3.5% milk sold per cow, milk production cost per cwt., returns per dollar feed fed, and labor and management income per man equivalent were most favorable at the 61 to 75 cow herd size.

Even though the average gross income was $59,395.00 there were 40% of the farms with a gross income below $40,000.00. Farmers needed a gross income of $40,000.00 in order to have an adequate amount of money for family living, debt repayment and expansion of the business.

THAXTON, Louis C., Youth With Special Needs in the Columbus Public Schools. Dissertation, Ph.D. 1973, Library, The Ohio State University, Columbus.

Purpose. To determine some characteristics of youth with special needs (YWSN) in the Columbus Public Schools and some important aspects of vocational programs to serve their needs.

Method. The author identified 29 schools in the Columbus School System which had ninth grade students. These schools were stratified according to the priority classification for Title I participation established by the school administration. Fifteen schools were randomly selected in proportion to the number in each strata. A ninth grade class of students was randomly chosen from the required academic classes in each school.

Teachers using an instrument developed by James B. Hamilton identified YWSN and classified each according to major cause of disadvantage. The author used a ninth grade questionnaire and The Ohio Vocational Interest Survey during group interview sessions to gather data relative to students' personal background, educational experiences, and occupational plans. The opinions of school staff personnel were also gathered.

Findings. Approximately one in four (23%) of the ninth grade students in the Columbus School System were YWSN. The largest single group, 49%, were academically disadvantaged. Twenty-two percent were socially disadvantaged, 13 percent intellectually disadvantaged, six percent were economically disadvantaged, six percent were ethnically disadvantaged, and five percent were physically handicapped.

Among the background characteristics of YWSN which were significantly different from those of other ninth grade youth were: age, place of origin, number of schools attended, and number of grades repeated, race and school

location. Those characteristics related to the educational experiences of YWSN which were significantly different from other ninth grade youth were the scores on the California Reading Test, scores on the California Mental Maturity Test, educational aspirations, number of school activities participated in, and interest in school work. No difference other than race and number of schools attended was found when YWSN were studied in respect to inner or outer city school location.

Fifty eight percent of the educators queried indicated that education programs for YWSN was "highly important." Special occupational education programs for the disadvantaged was chosen by educators from four types of occupational programs as their first choice program for YWSN.

YOUNG, Richard E., Professional Improvement Opportunities for State Extension Faculty in Fifteen States. Staff Study, July 1972, Ohio Cooperative Extension Service, The Ohio State University, Columbus.

Purpose. To determine educational benefits provided for extension personnel.

Method. A survey of professional improvement policies and procedures as related to state level extension faculty, and in states reasonably comparable to Ohio, was conducted for the Professional Improvement Committee of the Ohio Extension Professors' Association in the Spring of 1972. A two-page questionnaire was sent to the extension training leader in each of fifteen states; responses were received from all states.

Findings. Finds are summarized below.

All states permitted and encouraged their state extension faculty to attend professional conferences, workshops and related activities out of state without taking vacation time. Only one state said that no expense allowance was provided.

Thirteen states provided faculty with leave with pay for credit courses; ten provided it for non-credit study or research. Some states had fairly rigid policies which varied among states, while others had more flexible policies. Three states mentioned the availability of special financial aid for extension workers.

About half the states had arrangements for providing technical help for state extension faculty members. Tasks which they performed included library research, preparation of instructional materials, work in soil testing laboratories, and help with field days. There seemed to be interest in further exploitation of this possibility.

In twelve of the fifteen responding states, state extension faculty were required to pay fees for formal course work, though in two or three of those cases at substantially reduced rates.

Fee waivers for family members of state extension faculty were not available at any of the responding schools.

YOUNG, Richard E., SEMIS Statistical Evaluation, First Phase Analysis. Staff Study, October 1972, Ohio Cooperative Extension Service, The Ohio State University, Columbus.

Purpose. Professional extension workers in Ohio report their activities each month. Data are coded onto forms that are optically scanned for input to a computer program. These statistical data make up part of a State Extension Management Information System (SEMIS) which is compatible with a national system (EMIS).

In an effort to improve the system, two revisions were introduced in July, 1972. The first of these was the use of task numbers, a data element that makes it possible to report a variety of kinds of activities that may be worked on by more than one person, to an identified unit of work. The second was a new monthly code sheet that had the identification portion pre-printed.

A study was initiated to evaluate reaction of extension professionals and their secretaries to these two revisions. This report summarized the first phase which was conducted after the first monthly reports were submitted following the initiation of the changes.

Method. A random sample of 100 professionals was drawn from the total roster. Two copies of the instrument were sent to each person, one for him (her) and one for his (her) secretary to complete. The instrument consisted of two semantic differential devices; one to measure attitudes toward task numbers, and the other to measure attitudes toward the new monthly report form. A 75 percent response was obtained from secretaries while 50% of the faculty returned instruments.

Findings. Overall there was no difference between faculty and secretaries as both responded with attitude scores that defined neutral, or slightly positive feelings. There seemed to be slightly more favorable attitudes

toward the report form than toward task numbers.

More specifically, regarding attitudes toward task numbers, faculty felt task numbers were dispensible while secretaries felt they were helpful but (somewhat contrary) also dispensible. More specific findings regarding the new monthly report form showed that faculty felt it was helpful, desirable, productive and practical. Secretaries felt the form was helpful and easy.

STUDIES IN PROGRESS, 1973-74

Alvarez, Moises, Factors Related to the Utilization of Agricultural Technology in Agricultural Development Projects in Columbia. Dissertation, Ph.D. The Ohio State University, Columbus.

Bender, Ralph E., The 1973 Occupations of Recent Graduates of Vocational Agriculture in Ohio. Staff Study. The Ohio State University, Columbus.

Bender, Ralph E. and Larry Erpelding., Agricultural Technician Education in Ohio. Staff Study. The Ohio State University, Columbus.

Blackledge, Dale, Methods Used by 4-H Extension Agents to Communicate with Advisers of 4-H Clubs for Low Income Urban Youth. Masters Thesis. The Ohio State University, Columbus.

Boucher, Leon W. and Starling, John T., The Identification of Competencies in Agricultural Enterprises Needed by Employees. Staff Study. The Ohio State University, Columbus.

Breedlove, Frank, Performance Capabilities of Graduates of Agricultural Mechanics Programs in Joint Vocational Schools. Dissertation, Ph.D. The Ohio State University, Columbus.

Carter, Bryson, Factors Related to Grade A Milk Producers' Adoption of Dairy Production Testing. Master Thesis. The Ohio State University, Columbus.

Cobb, Nimrod, In-Service Education Activities of Teachers of Vocational Agriculture in Alabama. Dissertation, Ph.D. The Ohio State University, Columbus.

Cunningham, Clarence J., An Evaluation of the Graduate Program in Agricultural Education. Staff Study. The Ohio State University, Columbus.

Cunningham, Clarence J. and Young, Richard E., Staffing Patterns in the Cooperative Extension Service in the United States. Staff Study. The Ohio State University, Columbus.

Cunningham, Clarence J., Validation of Personnel Selection Instruments in the Cooperative Extension Service. Staff Study. The Ohio State University, Columbus.

Farrington, William S., Assessing the Competencies of Students Completing Agricultural Mechanics Programs in Ohio. Dissertation, Ph.D. The Ohio State University, Columbus.

Hill, Glenwood F., Attitudes of Tobacco Farmers Toward the Relationship Between Smoking and Health. Dissertation, Ph.D. The Ohio State University, Columbus.

Jenkins, David D., Analysis of New Extension Faculty Orientation. Staff Study. The Ohio State University, Columbus.

Jenkins, David D., Inventory of Professional In-Service Training Needs. Staff Study. The Ohio State University, Columbus.

Johnson, Carlton E., Evaluation of Textbooks Being Used in Mechanized Agriculture. Staff Study. The Ohio State University, Columbus.

Kowalka, Ronald C., The Effect of Computer Diagnostic Testing with Feedback on Student Mastery of Concepts in a Course on Research Methodology. Dissertation, Ph.D. The Ohio State University, Columbus.

Lahmers, Robert, The Community Resource Development Program in 4-H. Masters Thesis. The Ohio State University, Columbus.

Lindamood, John, Continuing Education Programs for the Dairy Food Industry. Dissertation, Ph.D. The Ohio State University, Columbus.

Luft, Vernon, The Development of Guidelines for Teacher Recruitment Programs in Agricultural Education. Dissertation, Ph.D. The Ohio State University, Columbus.

McCracken, J. David and Newcomb, Lawrence H., Development of a System for Determining Inservice Education Needs of Teachers. Staff Study. The Ohio State University, Columbus.

McGhee, Maxie B., Attitudes of Superintendents, Principals, County Vocational Directors, and Guidance Counselors Regarding Vocational Agriculture in the Secondary Schools of West Virginia. Dissertation, Ph.D. The Ohio State University, Columbus.

Miller, Raymond A., An Evaluation of the Living Learning Program for Undergraduates in Agriculture and Natural Resources at The Ohio State University. Dissertation, Ph.D. The Ohio State University, Columbus.

Moore, Eddie A., The Professional Education Competency Needs of Three Different Groups of Vocational Agriculture Teachers in Ohio. Dissertation, Ph.D. The Ohio State University, Columbus.

Morgan, John P., Benefits and Costs of an Adult Education Program for Farmers. Dissertation, Ph.D. The Ohio State University, Columbus.

Myers, Donald, The Effectiveness of Traditional Lecture and Telelecture in Teaching Adults. Dissertation, Ph.D. The Ohio State University, Columbus.

Ocampo, Jr., Saturnino, The Occupational and Educational Plans and Knowledge of Junior and Senior Vocational Agriculture Students. Dissertation, Ph.D. The Ohio State University, Columbus.

Parker, Kenneth A., Adapting the FFA to the Educational Needs of Urban Youth Enrolled in Vocational Agriculture. Dissertation, Ph.D. The Ohio State University, Columbus.

Pittman, Joe, Clientele Appraisal of Extension Compared by Staffing Patterns. Dissertation, Ph.D. The Ohio State University, Columbus.

Rathbun, Larry, The Relationship of Participation in Vocational Education Student Organizations and Student Success. Dissertation, Ph.D. The Ohio State University, Columbus.

Roediger, Roger D., A Study of the Validation Process for the National Curriculum Guides for Career Education in Agribusiness, Natural Resources and Environmental Protection. Dissertation, Ph.D. The Ohio State University, Columbus.

Rohrbach, Keith, Task and Manpower Analysis of the Ohio Food Processing Industry. Dissertation, Ph.D. The Ohio State University, Columbus.

Saah, Maurice K., Review and Synthesis of Research on Agricultural Education in Countries Other Than USA. Dissertation, Ph.D. The Ohio State University, Columbus.

Shannon, Theodore P., The Effectiveness of the Use of Simulation Materials in Vocational Education Programs for Youth with Special Needs. Dissertation, Ph.D. The Ohio State University, Columbus.

Simeral, Kenneth, The Effects of the Ohio Rapid Adjustment Program. Masters Thesis. The Ohio State University, Columbus.

Stachler, James, The Role of the College Work Study Student in Extension as Perceived by County Extension Agents and Work Study Students. Masters Thesis. The Ohio State University, Columbus.

Starling, John T., Farm Business Analysis Report - Programs Conducted by Teachers of Vocational Agriculture. Staff Study. The Ohio State University, Columbus.

Waktola, Aregay, Assessment of Developments Induced by Package Programs of Agricultural Technology in Rural Ethiopia. Dissertation, Ph.D. The Ohio State University, Columbus.

Warmbrod, J. Robert, Development of Instruments for Assessing the Performance Capabilities of Graduates of Vocational Agriculture Programs. Staff Study. The Ohio State University, Columbus.

Warmbrod, J. Robert, The Influence of Instruction in Agriculture in Grades 9 and 10 on Students' Subsequent Educational and Occupational Performance. Staff Study. The Ohio State University, Columbus.

Wilson, Richard H., Development of Curriculum Guides. Staff Study. The Ohio State University, Columbus.

Wilson, Richard H., National Study for the Assessment of Personnel Employed in Occupations Requiring Agricultural Knowledge. Staff Study. The Ohio State University, Columbus.

Wotowiec, Peter, Appraisal of Horticultural Education Programs in the Cleveland (Ohio) Public Schools. Dissertation, Ph.D. The Ohio State University.

Yoder, Edgar P., An Effectiveness Analysis of Public Vocational Education in Preparing Graduates for the Labor Force Considering Monetary and Nonmonetary Benefits. Dissertation, Ph.D. The Ohio State University, Columbus.

Young, Richard E., Evaluation of the Slide-Tape Set 'The Extension Story.' Staff Study. The Ohio State University, Columbus.

Young, Richard E., State Extension Management Information System Statistical Evaluation--Final Report. Staff Study. The Ohio State University, Columbus.

SUBJECT INDEX,
SUMMARIES OF STUDIES, 1972-73*

	Page
Achievement	
Newcomb, Lawrence H.	20
Administrative Organization	
Moore, Philip B.	16
Shane, James A.	22
Administrative Personnel	
McCracken, J. David and Gillespie, Wilma B.	12
McCracken, J. David and Gillespie, Wilma B.	13
Administrative Background	
Shane, James A.	22
Adoption (Ideas)	
McCutcheon, James Randall	14
Agricultural Colleges	
Boucher, Leon W.	1
Agricultural Technicians	
Cummins, James E.	3
Cummins, James E. and Bender, Ralph E.	5
Agriculture	
Boucher, Leon W.	1
Annual Reports	
Starling, John T.	26
College Choice	
Stanley, Norman M.	24
College Students	
Newcomb, Lawrence H.	20
Community College	
Shane, James A.	22
Comprehensive Programs	
Shane, James A.	22
Contracts	
Newcomb, Lawrence H.	20

*Index terms were selected from thesaurus of ERIC descriptors.

Subject Index - continued

	Page
Cultural Disadvantagement	
Thaxton, Louis C.	27
Diffusion	
McCutcheon, James Randall	14
Disadvantaged Youth	
Thaxton, Louis C.	27
Dropouts	
Cummins, James E.	3
Cummins, James E. and Bender, Ralph E.	5
Early Placement Programs	
Foreman, Ronald L.	7
Educational Benefits	
Young, Richard E.	29
Educational Experiments	
Foreman, Ronald L.	7
Howell, David L.	9
Newcomb, Lawrence H.	20
Environment	
Howell, David L.	9
Evaluation	
Boucher, Leon W.	1
Young, Richard E.	31
Extension Education	
Young, Richard E.	29
Farm Accounts	
Starling, John T.	26
Farmers	
Starling, John T.	26
Followup Studies	
Cummins, James E.	3
Cummins, James E. and Bender, Ralph E.	5
Foreman, Ronald L.	7
Grade 9	
Neavill, Arthur T.	18
Thaxton, Louis C.	27
Grade 10	
Neavill, Arthur T.	18

Subject Index - continued

	Page
Grading	
Newcomb, Lawrence H.	20
Graduate Surveys	
Boucher, Leon W.	1
Income	
Starling, John T.	26
Individual Characteristics	
Thaxton, Louis C.	27
Information Needs	
McCracken, J. David	11
McCracken, J. David and Gillespie, Wilma B.	12
Information Utilization	
McCracken, J. David	11
McCracken, J. David and Gillespie, Wilma B.	12
McCracken, J. David and Gillespie, Wilma B.	13
Instructional Materials	
Howell, David L.	9
Job Placement	
Foreman, Ronald L.	7
Learning Activities	
Boucher, Leon W.	2
Management Systems	
Young, Richard E.	31
Manuals	
Howell, David L.	9
Performance Based Teacher Education	
Boucher, Leon W.	2
Performance Tests	
Neavill, Arthur T.	18
Post Secondary Education	
Stanley, Norman M.	24
Preservice Education	
Boucher, Leon W.	1
Boucher, Leon W.	2
Professional Personnel	
McCutcheon, James Randall	14
Young, Richard E.	29

Subject Index - continued

	Page
Rural Youth	
Stanley, Norman M.	24
Simulation	
McCutcheon, James Randall	14
Staff Utilization	
Moore, Philip B.	16
State Departments of Education	
McCracken, J. David	11
Student Attitudes	
Howell, David L.	9
Student Characteristics	
Cummins, James E. and Bender, Ralph E.	5
Student Evaluation	
Neavill, Arthur T.	18
Systems Development	
Young, Richard E.	31
Teacher Educators	
McCracken, J. David and Gillespie, Wilma B.	13
Technical Education	
Cummins, James E.	3
Cummins, James E. and Bender, Ralph E.	5
University Extension	
Moore, Philip B.	16
Young, Richard E.	29
Young, Richard E.	31
Vocational Agriculture	
Neavill, Arthur T.	18
Stanley, Norman M.	24
Starling, John T.	26
Vocational Competencies	
Boucher, Leon W.	2
Vocational Directors	
McCracken, J. David	11
McCracken, J. David and Gillespie, Wilma B.	12
McCracken, J. David and Gillespie, Wilma B.	13
Work Experience	
Foreman, Ronald L.	7

Subject Index - continued

	Page
Workshops	
McCutcheon, James Randall	14

JDM:zp